

1181802



# PATENT SPECIFICATION

DRAWINGS ATTACHED

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Inventor: ALAN RALPH WHITE

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## COMPLETE SPECIFICATION

### Lifting Frame

We, ALEXANDER STEPHEN & SONS LIMITED, a Company organised under the laws of Great Britain of 35—47 Creechurch Lane, Leadenhall Street, London, E.C.3, do hereby declare that a patent may be granted to us and the method by which it is to be performed to be particularly described in and by the following statement:—

This invention relates to lifting frames for use with transit containers.

Lifting frames are frequently used to lift articles such as containers and usually comprise a rigid horizontal frame which is connected to some form of lifting device, the frame carrying on its lower surface a set of connectors which can engage the articles to be lifted. In the case of containers such connectors are sometimes arranged to engage openings in the upper surface of the container and when suitable locking devices have been engaged the lifting frame can be raised together with the container. Lifting frames of this kind are therefore frequently used with cranes or carrier devices which provide mobile means for lifting containers from the ground or some other surface and transporting them.

It is sometimes a disadvantage that a lifting frame for one size of container will not fit another and it is therefore necessary to remove the lifting frame from the lifting device and fit another which, can cause considerable delay.

According to the present invention a lifting frame has means for engaging and supporting transit containers of at least two different dimensions and includes connector means for containers of one dimension which are arranged at a greater vertical height than connector means for a container of larger dimensions.

Thus, the connectors for the smaller size of container will be at a greater height than the connectors for the larger container which are of course spread further apart. This arrangement therefore allows the frame to be lowered into position above a small container or a large

container as required; in the case of a small container the larger dimensioned connectors extending outside it and in the case of a larger container the larger dimensions connectors engaging it before the smaller ones are low enough.

Preferably the lifting frame comprises a main body portion and end portions which project downwardly and including a first set of connectors for engaging a container and which are carried on the end portions and a second set of connectors for engaging a container of smaller dimensions and which are carried on the main body portion or the end portions and spaced within the first set of connectors.

If desired, one or more further sets of connectors could also be carried on the end portions to suit containers of other dimensions.

Preferably the main body portion is substantially rectangular in plan and the end portions may be arranged to project downwardly from the main body portion at an obtuse angle.

Conveniently the container connector means are of the twist-lock type.

The invention also includes a lifting frame as set forth above in combination with a carrier device as described and claimed in the applicants co-pending British Patent Application No. 56640/66 (Serial No. 1181901).

The invention may be performed in many ways but one embodiment will now be described by way of example and with reference to the accompanying drawings in which Figure 1 is a side elevation of a lifting frame according to the invention and Figure 2 is a plan view of the device shown in Figure 1.

In the arrangement to be described the lifting frame is for use with a carrier device of the kind set forth in the applicants co-pending British Patent Application No. 56640/66 (Serial No. 1181801) and which is indicated in broken lines in Figure 1 of the drawing. This device is in the form of a vehicle having a bifurcated frame 1 which can be moved into

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Fig.1.

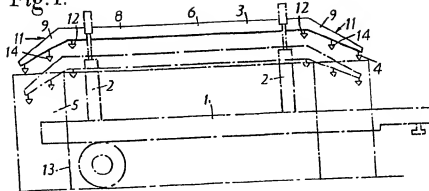
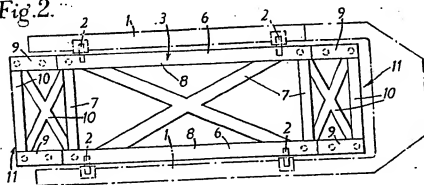


Fig.2.



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